REMARKS

Upon entry of the amendment claims 1 through 12, 14 through 17, and 19 through 22 will be in the application, with claims 1, 2, 3, 5, 7, 14, 15, 17, and 19 through 21 having been amended, and claims 13 and 18 having been cancelled. Claims 1, 14, 17, 19, and 21 are the independent claims herein. No new matter has been added. Entry of this amendment and further examination are respectfully requested.

Claim Rejections

Claim 17 is rejected under 35 U.S.C. §101. Claims 1 through 9 and 14 through 22 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over U.S. Patent No. 6,058,460 ("Nakhimovsky") in view of U.S. Patent No. 5,953,530 ("Rishi"). Claims 10 through 13 are rejected as being unpatentable over Nakhimovsky in view of Rishi and further in view of Liljeqvist.

As a preliminary matter, claim 17 has been amended in view of the §101 rejection.

Claims 1, 14, 17, 19, and 21

Amended independent claim 1 describes a method comprising retrieving a set of allocate buffer instructions from a storage device associated with a multithreaded network processing element. The network processing element has a local memory. The method also arranges for a first portion of the local memory to be allocated to a first thread context in accordance with an allocate buffer instruction and arranges for a second portion of the local memory to be allocated to a second thread context in accordance with a allocate buffer instruction. The allocate buffer instruction associated with a first thread symbolically references a buffer name and includes an indication of a read/write status of the first portion and the allocate buffer instruction associated with a second thread symbolically references the buffer name and includes an indication of a read/write status of the second portion. Moreover, The symbolically referenced buffer name includes both letters and numbers.

The art of record is not seen to disclose or to suggest the above features of amended independent claim 1. In particular, the art of record is not seen to disclose or to suggest a portion of local memory allocated to a thread by an allocate buffer instruction that includes an indication of a read/write status of the portion and symbolically references a buffer name wherein the symbolically referenced buffer name includes both letters and numbers.

Nakhimovsky relates to a method of allocating memory in a multithreaded computing environment using memory pools. Nakhimovsky, at column 4 line 52 through column 5 line 6, describes that each thread allocates memory for its memory pool using memory management routines. The only memory management routines listed are *malloc*, *free*, and *realloc* where *malloc* allocates a requested number of bytes up to the maximum size of the memory pool and returns a pointer that is the starting address of the memory allocated. The memory blocks are numbered and Nakhimovsky, at column 5 line 48 through column 6 line 4, describes a memory pool numbering system where NUM_POOLS is the number of memory pools. The memory pools are numbered 0 to NUM_POOLS −1.

Rishi, at column 13, line 47 though column 14 line 55 describes a library routine hereinafter "librtc.so". Librtc.so manages the concurrent allocation and freeing of memory space of the threads by monitoring the execution of *malloc*, *realloc* and *free* commands but librtc.so itself neither allocates, reallocates or frees the memory. Librtc.so only maintains a data structure of memory statuses and access rights but does not allocate memory.

Accordingly, the combination of Rishi and Nakhimovsky does not disclose or suggest a portion of local memory allocated to a thread by an allocate buffer instruction that includes an indication of a read/write status of the portion and symbolically references a buffer name wherein the symbolically referenced buffer name includes both letters and numbers.

The remaining art of record has been reviewed and is not seen to remedy the foregoing deficiencies in Rishi and Nakhimovsky. Therefore, the art of record, taken in any permissible combination, is not seen to disclose or to suggest a portion of local memory allocated to a thread by an allocate buffer instruction that includes an indication of a read/write status of the portion and symbolically references a buffer name wherein the symbolically referenced buffer name includes both letters and numbers.

In view of the foregoing, amended independent claim 1 is believed to be in condition for allowance. Claims 2 through 12 depend from claim 1 and are therefore also believed to be allowable for at least the foregoing reasons.

Amended independent claims 14, 17, 19, and 21 recite an article, an article, a method, and a system respectively, in which, a portion of local memory is allocated to a thread by an allocate buffer instruction that includes an indication of a read/write status of the portion and symbolically references a buffer name, wherein the symbolically referenced buffer name includes both letters and numbers. In view of the foregoing, amended independent claims 14, 17, 19, and 21 and their respective dependent claims are therefore also believed to be allowable for at least the foregoing reasons.

CONCLUSION

The outstanding Office Action presents a number of characterizations regarding the applied references, some of which are not directly addressed by this response. Applicants do not necessarily agree with the characterizations and reserve the right to further discuss those characterizations.

For at least the reasons given above, it is submitted that the entire application is in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience. Alternatively, if there remains any question regarding the present application or any of the cited references, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is kindly invited to contact the undersigned via telephone at (203) 972-4982.

Respectfully submitted,

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Date

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